Appl. No.

10/730,377

Filed

December 8, 2003

AMENDMENTS TO THE CLAIMS

1. (Canceled)

:

2. (New) A sole construction, comprising:

a plurality of stretchable layers spaced apart from one another, wherein the plurality of stretchable layers have a first side and a second side;

a plurality of actuators, each actuator positioned on the first side of at least one of a corresponding stretchable layer;

a plurality of chambers, each chamber being positioned on the second side of the a corresponding stretchable layer;

a plurality of perimeter walls, each perimeter wall surrounding a corresponding stretchable layer to prevent horizontal displacement of said layer when the actuator is compressed against the layer into a corresponding chamber.

- 3. (New) The sole construction of Claim 2, wherein each stretchable layer has raised walls.
- 4. (New) The sole construction of Claim 3, wherein the raised walls are on the first side of the stretchable layer.
- 5. (New) The sole construction of Claim 4, wherein the raised walls are shaped to correspond with an outer border of a corresponding actuator to guide the actuator against the stretchable layer and to minimize horizontal displacement of the stretchable layer when the actuator is compressed against the stretchable layer into a corresponding chamber.
- 6. (New) The sole construction of Claim 2, wherein each chamber is defined within a chamber layer, said chamber layer including said perimeter wall that at least partially surrounds said chamber.
- 7. (New) The sole construction of Claim 6, wherein each chamber layer further includes an inner wall surrounding the chamber that is shaped to correspond with an outer border of a corresponding actuator.
- 8. (New) The sole construction of Claim 6, wherein each chamber layer includes a plurality of plungers therein, and each corresponding actuator comprises an actuator layer having a plurality of actuators with chambers therein sized to receive the plurality of plungers.
- 9. (New) The sole construction of Claim 8, wherein each stretchable layer has raised walls on the second side of the stretchable layer shaped to surround the plurality of

Appl. No. : 10/730,377

Filed: December 8, 2003

plungers and guide the plurality of plungers into the plurality of chambers of the actuator layer, thereby minimizing horizontal displacement of the stretchable layer when the actuator layer is compressed against the stretchable layer into the chamber layer.

- 10. (New) The sole construction of Claim 2, wherein the plurality of stretchable layers lie in substantially the same plane.
- 11. (New) The sole construction of Claim 2, wherein the plurality of actuators include a heel actuator, a toe actuator, and a metatarsal actuator.
- 12. (New) The sole construction of Claim 2, wherein the sole construction is part of a footwear insert.
- 13. (New) The sole construction of Claim 2, wherein the sole construction is part of a footwear upper.
 - 14. (New) A sole construction, comprising:
 a resilient layer of stretchable material having a first side and a second side;
 at least one actuator layer positioned on the first side of resilient layer; and

a chamber layer positioned on the second side of the resilient layer, the chamber layer defining a chamber adapted to receive the at least one actuator therein, the chamber layer having a perimeter wall receiving and at least partially surrounding the resilient layer;

wherein the perimeter wall minimizes horizontal displacement of the resilient layer when the actuator layer is compressed against the resilient layer into the chamber of the chamber layer.

- 15. (New) The sole construction of Claim 14, wherein the resilient layer has raised walls.
- 16. (New) The sole construction of Claim 15, wherein the raised walls are on the first side of the resilient layer.
- 17. (New) The sole construction of Claim 15, wherein the raised walls are on the second side of the resilient layer.
- 18. (New) The sole construction of Claim 16, wherein the raised walls are shaped to correspond with an outer border of the at least one actuator to guide the actuator against the resilient layer and to minimize horizontal displacement of the resilient layer when the actuator is compressed against the resilient layer into the chamber of the chamber layer.

Appl. No. : 10/730,377

Filed: December 8, 2003

19. (New) The sole construction of Claim 14, wherein the chamber layer includes a plurality of plungers therein, and the at least one actuator comprises an actuator layer having a plurality of actuators with chambers therein sized to received the plurality of plungers.

- 20. (New) The sole construction of Claim 19, wherein the resilient layer has raised walls on the second side of the resilient layer shaped to surround the plurality of plungers and guide the plurality of plungers into the plurality of chamber of the actuator layer, thereby minimizing horizontal displacement of the resilient layer when the actuator layer is compressed against the resilient layer into the chamber of the chamber layer.
- 21. (New) The sole construction of Claim 19, wherein each of the actuators and plungers are positioned to correspond generally with the location of human toes.
- 22. (New) The sole construction of Claim 19, wherein each of the actuators and plungers are positioned to correspond generally with the location of metatarsal bones.
- 23. (New) The sole construction of Claim 14, wherein the at least one actuator comprises a heel thrustor.
- 24. (New) The sole construction of Claim 14, wherein the perimeter wall is shaped to correspond with an outer border of the resilient layer.
- 25. (New) The sole construction of Claim 14, wherein the chamber layer further includes an inner wall surrounding the chamber that is shaped to correspond with an outer border of the at least one actuator.